

# Work Order ID 51508

August 25, 2009 1:34:13 PM



Item ID: D205-634-041

Accept



Setup Start



Revision ID: D

Stop



Item Name: Replacement Skidtube

Start Date: 8/24/09 Start Qty: 1.00



Cust Item ID:

Required Date: 8/24/09 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:

*[Signature]*

Date: 08-25

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D2580

Rev D

100

0.00



DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy D205-634 bluefile & type labels per PPP D205-634-041 CHG002

*N/A*

110

0.00



BENDING MACHINE - SKIDTUBES

CNC Bend I

Memo

0.00

CNC Delta 100 Bender

1-Bend as per program D2580.C on CNC Bender and Folio FT009

2-Cut tubes as per Dwg. D2580

*DP*  
*9-9-29*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Work Center ID

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Set Up/  
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Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

120

0.00

Skidtubes

Memo

0.00

Skidtubes

1- Deburr ends

2- C'sink holes as per dwg without cutting fluid

3- Prepare tube for welding, remove alodine as required.

4- Scribe batch number insied aft end of tube.

130

QC5- Inspect part completeness to step on W/O

0.00

QC

Memo

0.00

Quality Control

27 8/24/09

1 9-10-1 ANM

W/O:		WORK ORDER CHANGES					
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Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

140

0.00



Skidtubes

Memo

0.00

Skidtubes

1-Weld step D2576 as per Dwg. D2580 and QSI 004

A/R Aluminum Rod

MIN 999

BE 09/09/07

2-Prep per QSI 005 and weld crossbolt spacers D2579 as per Dwg. D2580, QSI 004.

For D2579 spacers, weld one side, pass 3/8" drill, weld other side, pass 3/8" drill

A/R Aluminum Rod

MIN 999

BE 09/09/07

3-Grind welds as per Dwg D2580 Grind flush ridge made from bending

A.M. 09-10-09 ①

4-Drill holes for wearplates using DT 8217 & DT8937 Open holes to 19/64", adjust stopper not to hit web. Debur

A.M. 09-10-09 ①

5-Counterbore crossbolt spacers to 7/16" ID x 1.0" deep as per Dwg D2580. Debur holes

A.M. 09-10-09 ①

6-Drill pilot holes for aft cap using DT 8215 Open holes to 0.208". Debur

A.M. 09-10-09 ①

7-Drill pilot holes for Tow ring using DT8091, open to .640" and Debur

A.M. 09-10-09 ①

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Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start

Stop

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

150

QC10- Inspect visual per QSI004- ground welds

0.00



QC

Memo

0.00

Quality Control

160

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

170

Pressure Wash per QSI005 4.3

0.00



HandFinish

Memo

0.00

Hand Finishing



⇒ Sorkolov

(40) 7

⇒ Sorkolov

(40) 7

⇒ Jly 08/10/13

(40) 0

W/O:		WORK ORDER CHANGES					
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Page 5

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Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start

Stop

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

180

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00



Powdercoat

Memo

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

8:30 AM

320°F

9:00 AM

0.00

0.00

0.00

190

QC3- Inspect Part Finish



QC

Memo

Quality Control

OK 09-10-14

0.

W/O:		WORK ORDER CHANGES					
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Customer:

Reference:

Run Start



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

200

0.00



HandFinish

Memo

0.00

Hand Finishing

1-Install inserts & wearplates & Gaskets as per Dwg. D2580. Use a drop of Sikaflex on insert holes before installing wearplates  
A/R [ ] [ ] [ ] Sikaflex-291 M 112391  
Sikaflex expire date: 10/20

2-Coat D2594-3 O' rings with Petroleum Jelly and install on D2594-1 plugs as per Dwg D2580

3-Inspect for foreign object per QSI 024

4-Install 2855 Aft Cap as per Dwg D2580 and seal Fwd Step & Aft Cap with Sikaflex. Clean excess adhesive  
A/R [ ] [ ] [ ] Sikaflex-291 M 112391  
Sikaflex expire date: 10/20

5-Wing Walk as per Dwg D2580 and QSI 005 4.4  
Batch: M 112100

BR 09-10-14 (1)

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Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start  
Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
210 	QC5- Inspect part completeness to step on W/O	0.00							
QC	<b>Memo</b>	0.00	275010104			ⓧ	ⓧ		
Quality Control	Inspect Aft Cap, Fwd Step and Wing Walk of work to Current Step Inspect for Foreign objects per QSI 024								
220 	Packaging	0.00							
Packaging	<b>Memo</b>	0.00							
Packaging	Identify and pack for shipping as per PPPD205-634-041 Location: _____ PPP Rev: <u>PPD 51496</u>		09/10/22						
230 	QC21- Final Inspection - Work Order Release	0.00							
QC	<b>Memo</b>	0.00	09/10/23						
Quality Control									

09/10/22  
09/10/23  
PL 09-10-23

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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August 25, 2009 1:34:13 PM

Page 1

Work Order ID: 51508

Parent Item: D205-634-041RevD

Parent Item Name: Replacement Skidtube

Start Date: 8/24/09

Required Date: 8/24/09

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D2580-1RevD		Manufactured	No			110	Each	14.0000	1.0000			



205 Skidtube bent detail

B51753  
9-9-29

Warehouse	Loc Qty	Loc Code
<u>Location</u>		
Main Warehouse		
LG	13	
50757	3	
50761	6	
50976	2	
50977	2	
Main Warehouse		
ST	1	
50758	1	

D2576-3RevG

Manufactured No

140

Each

141.0000

1.0000



Step (maching detail)

Warehouse	Loc Qty	Loc Code
<u>Location</u>		
Main Warehouse		
ST	141	
43504	40	
46661	101	

1 88 09/09/07

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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August 25, 2009 1:34:13 PM

Page 2

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Start Date: 8/24/09

Required Date: 8/24/09

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D2579RevE		Manufactured	No			140	Each	464.0000	20.0000			



Crossbolt Spacer

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

464

43988

4

46434

4

46956

2

47797

9

48272

22

51314

100

51315

323

D2855RevA

Manufactured

No

200

Each

29.0000

1.0000



Cap

Warehouse Loc Qty Loc Code

Location

Main Warehouse

FP

-1

50513

-1

Main Warehouse

FP6

31

50513

31

Main Warehouse

ST

-1

50513

-1

20  
B-51525 AWR 9-10-1

1 BR09-10-14-

August 25, 2009 1:34:13 PM

Shop Packet Print

Page 2

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Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
AN3-5A		Purchased	No			200	Each	2,515.000	2.0000			



Bolt

Warehouse  
Location

Loc Qty

Loc Code

Main Warehouse

ST

2515

100188

212

105057 ✓

2245

15205

58

AN960JD10L

Purchased

No

200

Each

6,679.000 2.0000



Washer

Warehouse  
Location

Loc Qty

Loc Code

Main Warehouse

FP

-2

109632 ✓

-2

Main Warehouse

ST

6681

101291

16

104885

153

105793

236

109632

1276

110985

5000

2 BL 08-10-14

2 BL 08-10-14

August 25, 2009 1:34:13 PM

Shop Packet Print

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ALS7-1032-130		Purchased	No			200	Each	3,628.000	50.0000			



Insert

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST ~~1105~~ 112772 3628

105855 16

108606 52

111529 1560

111779 2000

AN3C4A Purchased No

200 Each 632.0000 50.0000



BOLT

Warehouse Loc Qty Loc Code

Location

Main Warehouse

FP 112720 -50

112314 -50

Main Warehouse

ST 682

112082 30

112314 652

1 BR0210-14

49 BR09-10-14.

50 BR09-10-14.

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AN960C10L  washer		Purchased	No			200	Each	2,946.000	50.0000			

Warehouse Loc Qty Loc Code

Location

OFFSHORE 112612  
FG 100

103585 100

Main Warehouse

FP -50

112116 -50

Main Warehouse

ST 2896

112116 2896

D3566-13RevC

Manufactured

No

200

Each

20.0000

1.0000

Gasket

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

FP 51606 -1

48166 -1

Main Warehouse

ST 21

45717 1

46889 1

48166 3

50265 16

50 BR 09-10-14.

1 BR 09-10-14

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D3566-5RevC		Manufactured	No			200	Each	17.0000	1.0000			
												
Gasket												

Warehouse Loc Qty Loc Code

Location

Main Warehouse

FP19

51260

-1

-1

Main Warehouse

ST

18

36113

1

46186

1

47318

1

48167

1

51260

14

D3566-1RevC

Manufactured

No

200

Each

27.0000

2.0000



Gasket

Warehouse Loc Qty Loc Code

Location

Main Warehouse

FP

51259

-2

-2

Main Warehouse

ST

29

46349

1

47434

2

51218

1

51259

25

August 25, 2009 1:34:13 PM

Shop Packet Print

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

# Picklist Print

August 25, 2009 1:34:13 PM

Work Order ID: 51508



Parent Item: D205-634-041RevD



Parent Item Name: Replacement Skidtube

Start Date: 8/24/09

Required Date: 8/24/09

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3564-11RevD		Manufactured	No			200	Each	29.0000	1.0000			

Wearshoe

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
FP	22	
51256	22	
Main Warehouse		
FP19	-1	
50112	-1	
Main Warehouse		
ST	8	
45823	1	
50112	7	

51594

1 BR 004-10-14

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

August 25, 2009 1:34:13 PM

Page 8

Work Order ID: 51508

Parent Item: D205-634-041RevD

Parent Item Name: Replacement Skidtube

Start Date: 8/24/09

Required Date: 8/24/09

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3564-13RevD		Manufactured	No			200	Each	30.0000	1.0000			

Wearshoe

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
FP17	17	
50270	17	
Main Warehouse		
FP19	-1	
50270	-1	
Main Warehouse		
ST	14	
45409	3	
46495	10	
47867	1	

50059

1 B209-10-14.

August 25, 2009 1:34:13 PM

Shop Packet Print

Page 8

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

August 25, 2009 1:34:13 PM

Page 9

Work Order ID: 51508

Parent Item: D205-634-041RevD

Parent Item Name: Replacement Skidtube



Comments:

Start Date: 8/24/09

Required Date: 8/24/09

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3564-9RevD		Manufactured	No			200	Each	20.0000	1.0000			
												
Wearshoe												

Warehouse Loc Qty Loc Code

Location

Main Warehouse

FP19 *51675* -2

51258 -2

Main Warehouse



ST 22

44659 1

45825 1

51258 20

*1 BRO9-10-14*

D3564-5RevD		Manufactured	No			200	Each	17.0000	1.0000			
												
Wearshoe												

Warehouse Loc Qty Loc Code

Location

OFFSHORE

FG *51655* 2

34806 2

Main Warehouse

FP19 15

48555 1

51257 14

*1 BRO9-10-14*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

August 25, 2009 1:34:13 PM

Work Order ID: 51508

Parent Item: D205-634-041RevD

Parent Item Name: Replacement Skidtube

Comments:

Start Date: 8/24/09

Required Date: 8/24/09

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D2594-3RevC		Manufactured	No			200	Each	542.0000	16.0000			
O-Ring, 205 Skidtube												

Warehouse                      Loc Qty                      Loc Code  
Location

Main Warehouse

ST 51613                      542  
27168                      44  
29908                      498

16 # 08-10-14

D2594-1RevC		Manufactured	No			200	Each	348.0000	16.0000			
Plug, 205 Skidtube												

Warehouse                      Loc Qty                      Loc Code  
Location

Main Warehouse

ST 51757                      348  
42221                      16  
42807                      92  
43884                      3  
46435                      2  
47251                      235

16 # 08-10-14

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**DART**

DESIGN <i>[Signature]</i>	DRAWN BY <i>RH</i>	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D2580	REV. D SHEET 1 OF 3
DATE 07.02.27		TITLE 205 SKIDTUBE ASSEMBLY	SCALE NTS
A	96.09.16	NEW ISSUE	
B	96.12.02	AS MANUFACTURED	
C	98.08.26	REDRAWN, INCLUDED DEO 9094/9097	
D	07.02.27	CHANGE TO SS WEARPLATES AND GASKETS, INCLUDE DEO 9124/9183	

**RELEASED**  
07-06-28 *[Signature]*

QTY -041	QTY -045	Part Number	Description
X		D2580-041	SKIDTUBE ASSEMBLY
	X	D2580-045	SKIDTUBE ASSEMBLY
1	1	D2500-1-190	EXTRUSION
1	1	D2576-3	STEP
20	24	D2579	CROSS BOLT SPACER
16	16	D2594-1	PLUG
16	16	D2594-3	O-RING
1	1	D2596	205 WEB
1	1	D2855	AFT CAP
1	1	D3564-5	WEARSHOE
1	1	D3564-9	WEARSHOE
1	1	D3564-11	WEARSHOE
1	1	D3564-13	WEARSHOE
2	2	D3566-1	GASKET
1	1	D3566-5	GASKET
1	1	D3566-13	GASKET
50	50	ALS7-1032-130 or AKS7-1032-130 or AKS4-1032-130 or AELS-1032-130	INSERT
50	50	AN3C4A	BOLT
2	2	AN3-5A	BOLT
50	50	AN960C10L	WASHER
2	2	AN960JD10L	WASHER

**GENERAL NOTES:**

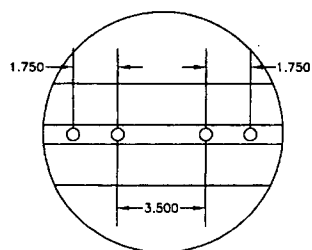
- 1) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 2) ALL DIMENSIONS ARE IN INCHES
- 3) INSERT D2596 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241 ADHESIVE PER DART QSI 015 BEFORE BENDING. ENSURE HOLES LINE-UP.
- 4) BEND AS A SMOOTH RADIUS STARTING WITH A MAXIMUM CENTERLINE RADIUS OF 60 AND ENDING WITH A MINIMUM RADIUS OF 30. A MAXIMUM REDUCTION OF 0.200 IN DIAMETER IS ALLOWABLE IN THE BENT PORTION OF THE TUBE.
- 5) USE DART DRILL TEMPLATE TD2577-205 TO LOCATE AND DRILL  $\varnothing 0.297$  HOLES FOR WEARSHOE INSERTS. INSTALL ALS7-1032-130 PER SECTION D-D (50 PLACES) AFTER FINISH. INSTALL AN3C4A BOLTS AND AN960C10L WASHERS WITH SIKAFLEX-241/-291.
- 6) WELDING TO BE DONE PER DART QSI 004.
- 7) FINISH:  
SEE NOTES ON  
PAGE 2 FOR D2580-041 AND  
PAGE 3 FOR D2580-045
- 8) INSERT D2594-1 PLUG C/W D2594-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE) AFTER FINISH (16 PLACES).

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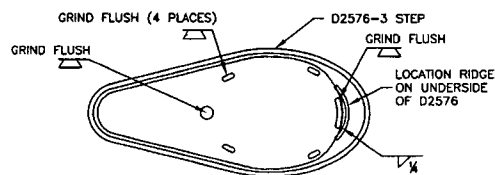
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51508

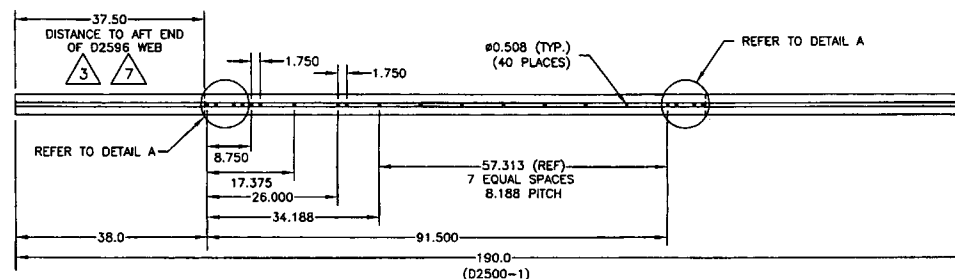
**DETAIL A**  
SCALE 5:24



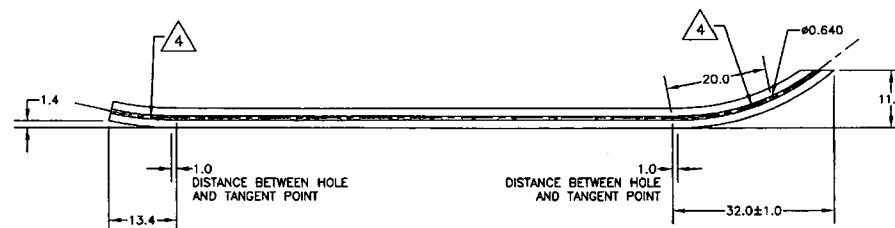
**DETAIL B**  
SCALE 5:24



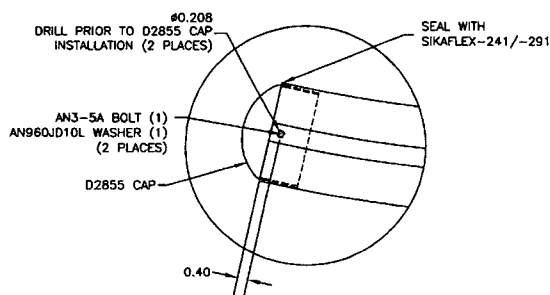
**D2580-1 DRILLING DETAIL**



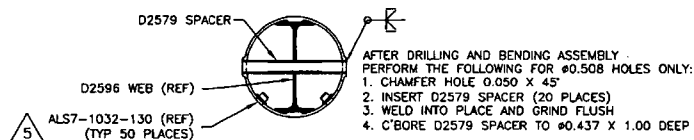
**D2580-1 BENDING AND CUTTING DETAIL**



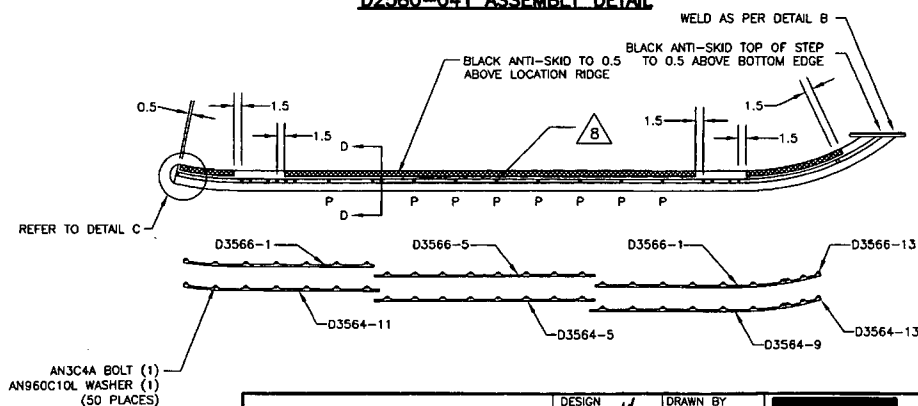
**DETAIL C**  
SCALE 5:24



**SECTION D-D**  
SCALE 5:24



**D2580-041 ASSEMBLY DETAIL**



**D2580-041 NOTES**

- i) FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1 PRIOR TO INSERTING D2596 WEB  
POWDER COAT ASSEMBLY GLOSS WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3  
BLACK ANTI-SKID PAINT AS INDICATED PER DART QSI 005 4.4

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DESIGN *[Signature]*

CHECKED *[Signature]*

DATE

07.02.27

DRAWN BY *[Signature]*

APPROVED *[Signature]*

**DART**

**DART AEROSPACE LTD.**  
HARRISBURG, ONTARIO, CANADA

DRAWING NO.

D2580

TITLE

205 SKIDTUBE ASSEMBLY

REV. 0

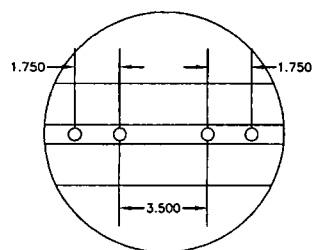
SHEET 2 OF 3

SCALE

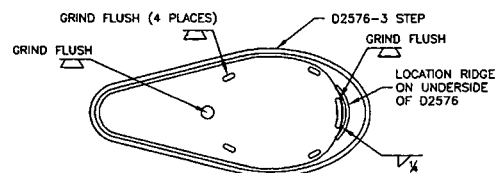
1:24

51508

**DETAIL E**  
SCALE 5:24

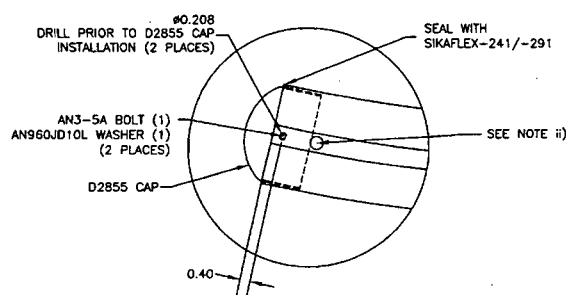


**DETAIL F**  
SCALE 5:24

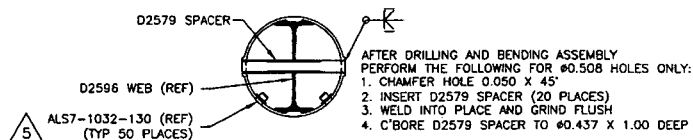


**RELEASED**  
07.06.28

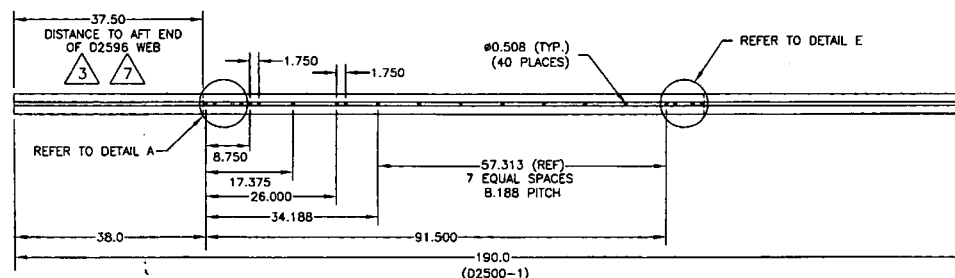
**DETAIL G**  
SCALE 5:24



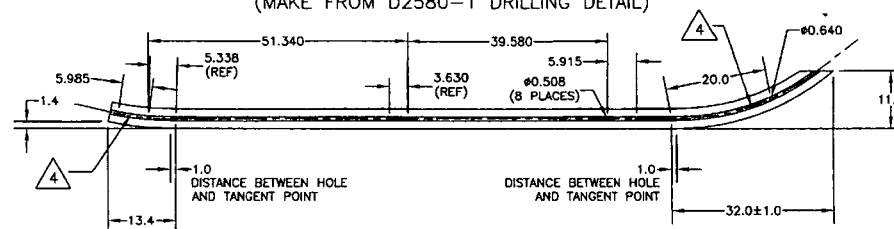
**SECTION H-H**  
SCALE 5:24



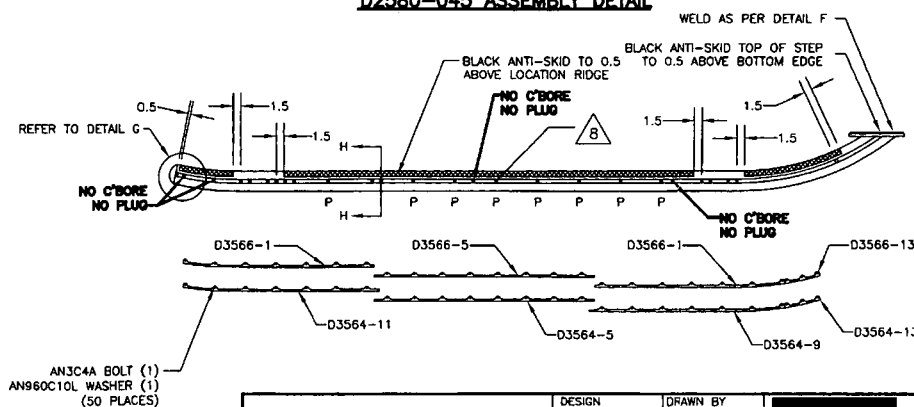
**D2580-1 DRILLING DETAIL**



**D2580-5 BENDING AND CUTTING DETAIL**  
(MAKE FROM D2580-1 DRILLING DETAIL)



**D2580-045 ASSEMBLY DETAIL**



**D2580-045 NOTES**

- i) FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1 PRIOR TO INSERTING D2596 WEB  
POWDER COAT ENTIRE ASSEMBLY GREEN (REF. 4.3.5.8) PER DART QSI 005 4.3  
BLACK ANTI-SKID PAINT AS INDICATED PER DART QSI 005 4.4
- ii) IT IS ACCEPTABLE TO GRIND A RELIEF IN THE D2855 AFT CAP TO PREVENT INTERFERENCE WITH THE SPACER AT THIS LOCATION

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DESIGN RH	DRAWN BY RH	<b>DART</b>	DART AEROSPACE LTD. HAWKESBURY, ONTARIO, CANADA
CHECKED H	APPROVED H	DRAWING NO. D2580	REV. 0
DATE 07.02.27	TITLE 205 SKIDTUBE ASSEMBLY	SHEET 3 OF 3	SCALE 1:24

NO. 212

AWS D17.1.2001  
QUALIFICATION TEST RECORD

Name: Barday Elliott  
Job number: 51505  
Part number: D205-634-041  
Description: 205 skid tube  
Welding Process: Tig[☒] Mig[ ]  
Base material: Aluminium  
Current: AC[ ] DC[ ]

**TEST REQUIREMENTS AND RESULTS**

Visual:	pass[ <input checked="" type="checkbox"/> ]	fail[ ]
Penetration:	pass[ <input checked="" type="checkbox"/> ]	fail[ ]

**UNACCEPTABLE**

Cracks:	pass[ <input checked="" type="checkbox"/> ]	fail[ ]
Undercut:	pass[ <input checked="" type="checkbox"/> ]	fail[ ]
Pin holes:	pass[ <input checked="" type="checkbox"/> ]	fail[ ]
Overlap (cold lap)	pass[ <input checked="" type="checkbox"/> ]	fail[ ]
Porosity (surface):	pass[ <input checked="" type="checkbox"/> ]	fail[ ]
Coloration:	pass[ <input checked="" type="checkbox"/> ]	fail[ ]

Qualifier <u>Pat. D. [Signature]</u>	Date of Test Coupon <u>09-10-09</u>
Welder <u>Barday Elliott [Signature]</u>	Date of Test Coupon <u>09-10-09</u>

The above named individual is qualified in accordance with AWS D17.1.2001 to weld